

### REMARKS

Claims 1, 6, 10, 19 and 20 are amended to overcome rejections over the prior art.

Claims 3, 5, 9 and 13-17 are canceled.

Claims 21-39 are added.

#### Claims 1

To overcome the cited prior art, claim 1 is amended to include an additional limitation taken from original claim 10. The added limitation is an elongated permanent magnet having a surface adjacent and facing the surface of the core

This is not disclosed by the cited references, including U.S. Patent No. 3,535,566 to Smith. That is because Smith does not disclose a permanent magnet, as claim 1 is amended to recite. In Smith, the rotor segment halves 22 and 23, like the core 37, are not permanent magnets but rather laminated steel as indicated at col. 3, lines 19-27. The "poles" of these rotor segments 22 and 23 are not permanent but "electrically excited or induced" (col 1, lines 59-62 and 59-62). Smith provides no suggestion to make his rotor from permanent magnets. Therefore, claim 1 is patentable over the cited prior art.

#### Claims 2, 4, 6-8, 10-12 and 18

Claims 2, 4, 6-8, 10-12 and 18 depend from claim. The limitations that claims 2, 4, 6-8, 10-12 and 18 add to claim 1 distinguish the invention further from the prior art. Therefore, claims 2, 4, 6-8, 10-12 and 18 are also patentable.

For example, claim 12 recites the magnet being magnetized such that each flux line is generally perpendicular to the section of the magnet surface that the flux line intersects. Even if one were to modify the rotor halves 22 and 23 of Smith by making them from permanent magnets instead of the laminate Smith prescribes, one would still not arrive at claim 12. That is because there is no suggestion in Smith to magnetize the halves 22 and 23 at all, much less to magnetize them such that the flux lines are generally perpendicular to the magnet surface as claimed.

#### Claim 19

Claim 19 recites a magnet. Claim 19 is herein amended to specify that the magnet is a permanent magnet.

This is not disclosed by any of the cited references, including Smith. Smith does not disclose a permanent magnet, as claim 19 is amended to recite. As explained above, the rotor segment halves

22 and 23 of Smith are not permanent magnets but rather laminated steel. Therefore, claim 19 is patentable over the cited prior art.

#### **Claim 20**

Claim 20 recites a magnet. Claim 20 is amended to specify that the magnet is a permanent magnet.

This is not disclosed by any of the cited references, including Smith. Smith does not disclose a permanent magnet, as claim 20 is amended to recite. As explained above, the rotor segment halves 22 and 23 of Smith are not permanent magnets but rather laminated steel. Therefore, claim 20 is patentable over the cited prior art.

#### **Claims 21-36**

The Examiner indicated that claims 5, 15, 16 and 18 would be allowable if rewritten in independent form.

Accordingly, claims 5, 15 and 16 are rewritten in independent form as new claims 21, 28 and 29, respectively. Claims 21, 28 and 29 should therefore be allowable.

Similarly, claim 18 is rewritten as new claim 34, with the exception that both occurrences of the term "identical" are omitted. Specifically, "a second core identical to and parallel" is replaced with "a second elongated core parallel", and "three identical elongated magnets" is replaced with "three elongated magnets". Applicant requests that the Examiner allow this alteration in claim language, because the claim is patentable over the cited references even with this alteration.

New claims 22-27, 30-33, and 35-36 depend from these allowable claims and should therefore also be allowable.

#### **Claim 37**

Claim 37 includes all the limitations of claim 5, which the Examiner found to be allowable if rewritten in independent form, except for the limitation of the core being bowed. Even without this limitation, claim 37 recites an elongated core that is arcuate about an axis of rotation, the core comprising a first section that is resistant to eddy currents that would circulate along only either of two opposite faces of the first section, and further comprising a second section that is resistant to eddy currents that would circulate along any face of the second section. The cited references, even in combination, do not disclose these limitations. Therefore, claim 37 is patentable over the cited prior art even without the limitation of the core being bowed.

### **Claim 38**

Claim 38 has all the limitations of original claim 15, which the Examiner found to be allowable if rewritten in independent form, except for the limitation of the core being bowed. Even without this limitation, 38 still recites brackets installed about coil-free spaces between adjacent coils, the brackets configured to provide a flat peripheral surface defined by the peripheral surfaces of the coils and the brackets. The cited references, even in combination, do not disclose these limitations. Therefore, claim 38 is patentable over the cited prior art even without the limitation of the core being bowed.

### **Claim 39**

Claim 39 has all the limitations of original claim 18, which the Examiner found to be allowable if rewritten in independent form, except for the limitations of the core being bowed and the cores and magnets being "identical". Even without these limitations, claim 39 still recites two parallel elongated cores and three elongated magnets that are parallel with the cores, the cores being interspersed between the magnets. The cited references, even in combination, do not disclose these limitations. Therefore, claim 39 is patentable over the cited prior art even without the limitation of the core being bowed and the cores and magnets being identical.

The application should now be in condition for allowance, and allowance is requested.

Respectfully Submitted,

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